

Top Secret



**NATIONAL PHOTOGRAPHIC
INTERPRETATION CENTER**

PHOOTOGRAPHIC
INTERPRETATION
REPORT

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**SOVIET NATIONAL-LEVEL, VIP-SUPPORT
AIRBORNE-COMMAND-RELATED
AIRCRAFT (TSRU)**

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PIR-023/79

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SOVIET NATIONAL-LEVEL, VIP-SUPPORT/AIRBORNE-COMMAND-RELATED AIRCRAFT (TSRU)

INTRODUCTION

1. (TSRU) Through analysis of overhead and hand-held imagery [redacted] five types of Soviet aircraft related to national-level VIP support and/or airborne command have been identified. These aircraft have been temporarily designated as follows: CLASSIC Communications Satellite Modified (Comsat Mod), CRUSTY Comsat Mod, CRUSTY VIP Mod, COOT Airborne Command Post Modified (ACP Mod), and COOT Relay Mod. This report presents key photographic signatures and overhead or hand-held imagery of each aircraft and a brief discussion and imagery of Moscow/Shchelkovo [redacted] and Moscow/Vnukovo [redacted] Airfields, USSR, where all five of these types of aircraft have been observed. [redacted]

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DESCRIPTION

CLASSIC Comsat Mod



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All of the CLASSIC Comsat Mods observed thus far have had civilian markings. A list of the BNs of those CLASSIC Comsat Mods identified from photography [redacted] is included on Figure 1. On [redacted] at Tashkent Airfield South [redacted] one of these aircraft [redacted] was observed [redacted]. This aircraft was apparently later repainted and now appears to be similar to a conventional IL-62 (Figure 4). [redacted]

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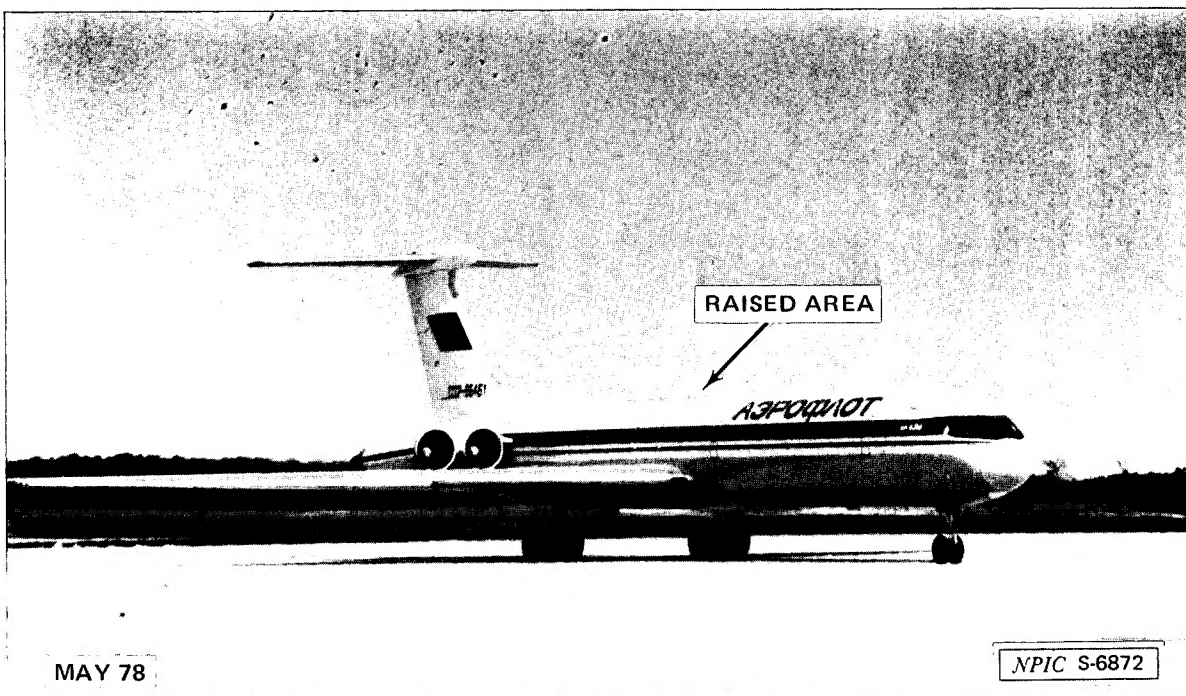


FIGURE 2. CLASSIC COMSAT MOD, ANDREWS AIR FORCE BASE, USA

CRUSTY Comsat Mod

[REDACTED]

[REDACTED] This aircraft has not been identified from photography; however, a TU-134 CRUSTY [REDACTED] with a modified raised area similar to that previously seen on the CLASSIC Comsat Mod was observed on [REDACTED] The [REDACTED]

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5. (TSR) The CRUSTY Comsat Mod, unlike the conventional TU-134 CRUSTY, has [REDACTED] All CRUSTY Comsat Mods observed thus far have had civilian markings. The only BN identified on a CRUSTY Comsat Mod from photography [REDACTED]

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CRUSTY VIP Mod

6. (TSRU) The CRUSTY VIP Mod was identified through analysis of hand-held photography of a modified TU-314 CRUSTY [redacted] which supported the movements of Soviet Defense Minister Ustinov during 1978, and of satellite imagery of a similar aircraft observed at both Kharkov Airframe Plant 135 [redacted] and Moscow/Shchelkovo Airfield. [redacted]

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7. (TSR) The CRUSTY VIP Mod, unlike the conventional TU-134 CRUSTY, has [redacted]

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[redacted] The only BN identified on a CRUSTY VIP Mod from photography is [redacted]

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COOT ACP Mod

[redacted]
[redacted] These aircraft were first observed on imagery at Ramenskoye Flight Test Center [redacted] and later at Moscow/Shchelkovo Airfield.

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9. (TSR) The COOT ACP Mod, unlike the civilian IL-18 COOT, [redacted]

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[redacted] COOT ACP Mods have usually been observed with civilian markings, but at least one had military markings. This aircraft with military markings may have been withdrawn from military service for conversion to a COOT ACP Mod and subsequently repainted. It was last positively identified at Ramenskoye Flight Test Center on [redacted] A list of the BNs of those COOT ACP Mods identified from imagery is included on Figure 8.

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COOT Relay Mod

[redacted]

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FIGURE 7. CRUSTY VIP MOD, HELSINKI-VANTAA AIRPORT, FINLAND

11. (TSR) The COOT Relay Mod, unlike the conventional IL-18 COOT, [REDACTED]

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[REDACTED] All COOT Relay Mods that have been observed have had civilian markings. The only BNs identified on the COOT Relay Mod from photography are [REDACTED]

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Moscow/Shchelkovo Airfield

12. (TSRU) All five of the previously discussed types of aircraft related to national-level VIP support and/or airborne command have been identified on photography of Moscow/Shchelkovo Airfield, [REDACTED]

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[REDACTED] Figure 12 is a mosaic from [REDACTED] of Moscow/Shchelkovo Airfield showing the usual parking locations of the various types of national-level, VIP-support/airborne-command-related aircraft. Table 1 lists the numbers and types of these aircraft identified at Moscow/Shchelkovo Airfield from [REDACTED]

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Moscow/Vnukovo Airfield

13. (TSRU) Moscow/Vnukovo Airfield [redacted]

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[redacted] The CLASSIC Comsat Mod is the only one of the five types of national-level, VIP-support/airborne-command-related aircraft discussed in this report that has been identified at this airfield. This is probably due to a lack of high-resolution/large-scale coverage of the airfield. Usually 12 to 16 CRUSTY and three to four COOT are observed parked at the airfield near the usual parking location of the CLASSIC Comsat Mod (Figure 13). A number of these aircraft may be national-level, VIP-support/airborne-command-related types.

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14. (TSRU) Table 2 lists the numbers and types of national-level, VIP-support/airborne-command-related aircraft identified at Moscow/Vnukovo Airfield from [redacted]

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Top Secret RUFF UMBRA*Table 1*

*National-Level, VIP-Support/Airborne-Command-Related Aircraft Identified at
Moscow/Shchelkovo Airfield, February 75—December 78**

This table in its entirety is classified TOP SECRET RUFF UMBRA

Date	No & Type of Aircraft	Remarks
	—	None Discernible
	—	None Discernible
	—	None Discernible
	1 COOT ACP Mod	
	1 Poss COOT ACP Mod	
	1 COOT ACP Mod	
	—	None Discernible
	1 COOT ACP Mod	
	2 COOT Relay Mod	
	2 Poss COOT Relay Mod	
	—	None Discernible
	1 COOT ACP Mod	
	1 COOT ACP Mod	
	1 Poss COOT ACP Mod	
	—	None Discernible
	1 CLASSIC Comsat Mod	
	1 CRUSTY Comsat Mod	
	3 COOT Relay Mod	
	—	None Discernible
	—	None Discernible
	2 COOT ACP Mod	
	1 COOT ACP Mod	
	2 Poss COOT ACP Mod	
	—	None Discernible
	1 COOT ACP Mod	
	—	None Discernible
	6 COOT ACP Mod	
	2 CLASSIC Comsat Mod	
	6 COOT ACP Mod	
	2 Prob CLASSIC Comsat Mod	
	6 COOT ACP Mod	
	2 Poss CLASSIC Comsat Mod	
	2 COOT ACP Mod	
	5 Poss COOT ACP Mod	
	2 CLASSIC Comsat Mod	
	1 CRUSTY Comsat Mod	

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Top Secret RUFF UMBRA*Table 1 (cont)*

Date	No & Type of Aircraft	Remarks
	2 COOT ACP Mod	
	2 CLASSIC Comsat Mod	
	[REDACTED]	
	1 CRUSTY Comsat Mod	
	1 CRUSTY VIP Mod	
	1 Prob COOT Relay Mod	
	5 COOT ACP Mod	
	2 Prob CLASSIC Comsat Mod	
	1 Prob CRUSTY Comsat Mod	
	1 Prob COOT Relay Mod	
	8 COOT ACP Mod [REDACTED]	
	[REDACTED]	
	2 CLASSIC Comsat Mod	
	[REDACTED]	
	1 CRUSTY Comsat Mod	
	2 CRUSTY VIP Mod	
	3 COOT Relay Mod	
	8 COOT ACP Mod [REDACTED]	
	[REDACTED]	
	2 CLASSIC Comsat Mod	
	[REDACTED]	
	1 Prob CRUSTY Comsat Mod	
	1 COOT Relay Mod	
	—	Cloud covered
	5 COOT ACP Mod	
	8 Prob COOT ACP Mod	
	6 COOT ACP Mod	
	8 COOT ACP Mod	
	1 Prob CLASSIC Comsat Mod	
	1 Poss CLASSIC Comsat Mod	
	8 COOT ACP Mod [REDACTED]	
	[REDACTED]	
	9 COOT ACP Mod	
	2 Prob CLASSIC Comsat Mod	
	7 COOT ACP Mod	
	9 COOT ACP Mod	
	3 CLASSIC Comsat Mod	
	6 COOT ACP Mod	
	1 CLASSIC Comsat Mod	
	1 Prob CLASSIC Comsat Mod	

* Bort numbers given when identified.

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Top Secret RUFF UMBRA*Table 2*

*National-Level, VIP-Support/Airborne-Command-Related Aircraft Identified at
Moscow/Vnukovo Airfield, February 75—December 78**

This table in its entirety is classified TOP SECRET RUFF UMBRA

Date	No & Type of Aircraft	Remarks
	—	None discernible
	—	None discernible
	—	None discernible
	—	None discernible
	—	None discernible
	1 CLASSIC Comsat Mod	
	1 Prob CLASSIC Comsat Mod	
	1 CLASSIC Comsat Mod	
	1 Prob CLASSIC Comsat Mod	
	—	None discernible
	—	None discernible
	—	None discernible
	1 CLASSIC Comsat Mod	
	—	None discernible
	—	None discernible
	—	None discernible
	—	None discernible
	2 Prob CLASSIC Comsat Mod	
	—	None discernible
	—	None discernible
	—	None discernible
	—	None discernible
	—	None discernible
	—	None discernible
	—	None discernible
	2 Prob CLASSIC Comsat Mod	
	—	None discernible
	—	None discernible
	4 CLASSIC Comsat Mod	

coverage last available in 1978.

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Top Secret RUFF UMBRA**REFERENCES****IMAGERY**

(TSR) All KEYHOLE imagery of suitable interpretability acquired through December 1978 was used in the preparation of this report.

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Small-Format Imagery

Agency/Mission	Accession No	Date	Classification	Figure No
CIA	1517368	May 78	UNCLASSIFIED	2
DIA	6 831 0226 78	18 Jul 78	UNCLASSIFIED	7
DIA	2 217 7048 78	10 May 78	CONFIDENTIAL	9, 10 (top), 11
DIA	2 217 7062 75	1975	CONFIDENTIAL	10 (bottom)
DIA	6 844 0099 77	29 Apr 77	CONFIDENTIAL	—
DIA	6 831 0221 77	7 Oct 77	SECRET	—
DIA	6 843 0339 78	17 May 78	CONFIDENTIAL	—
DIA	6 843 0359 78	26 May 78	CONFIDENTIAL	—

DOCUMENTS

2. DEFSMAC. S/DQ/438-78, SS-20 IRBM Launched from KYMTR, 10 October 1978, 101512Z Oct 78 (SECRET)

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REFERENCES (Continued)

[Empty box for references]

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REQUIREMENT

Project 130058NE

(S) Comments and queries regarding this report are welcome. They may be directed to []
[] Warsaw Pact Forces Division, Imagery Exploitation Group, NPIC, []
[]

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(S) The author wishes to acknowledge the extensive contributions to this report by []
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List of Conversion Factors by Classification

UNITS OF LENGTH

<i>IF YOU HAVE</i>	<i>MULTIPLY BY</i>	<i>TO OBTAIN</i>
MILLIMETERS	0.0394	INCHES
CENTIMETERS	0.3937	INCHES
INCHES	25.4000	MILLIMETERS
INCHES	2.5400	CENTIMETERS
FEET	0.3048	METERS
FEET	0.0003	KILOMETERS
YARDS	0.9144	METERS
METERS	3.2808	FEET
METERS	0.0005	MILES(NAUTICAL)
METERS	1.0936	YARDS
KILOMETERS	3280.8400	FEET
KILOMETERS	0.6214	MILES(STATUTE)
KILOMETERS	0.5400	MILES(NAUTICAL)
MILES(STATUTE)	1.6093	KILOMETERS
MILES(NAUTICAL)	6076.1154	FEET
MILES(NAUTICAL)	1.8520	KILOMETERS
MILES(NAUTICAL)	1852.0000	METERS

UNITS OF MASS

<i>IF YOU HAVE</i>	<i>MULTIPLY BY</i>	<i>TO OBTAIN</i>
KILOGRAMS	2.2046	POUNDS(AVOIR.)
POUNDS(AVOIR.)	0.4536	KILOGRAMS
SHORT TONS	0.9072	METRIC TONS
METRIC TONS	1.1023	SHORT TONS
METRIC TONS	0.9842	LONG TONS
LONG TONS	1.0160	METRIC TONS

UNITS OF VOLUME

<i>IF YOU HAVE</i>	<i>MULTIPLY BY</i>	<i>TO OBTAIN</i>
LITERS	0.2642	GALLONS
LITERS	0.0063	BARRELS(POL)
LITERS	0.0010	CUBIC METERS
GALLONS	3.7854	LITERS
GALLONS	0.1337	CUBIC FEET
GALLONS	0.0238	BARRELS(POL)
GALLONS	0.0038	CUBIC METERS
BUSHELS	0.0352	CUBIC METERS
CUBIC FEET	7.4805	GALLONS
CUBIC FEET	0.1781	BARRELS(POL)
CUBIC FEET	0.0283	CUBIC METERS
CUBIC YARDS	0.7646	CUBIC METERS
BARRELS(POL)	158.9873	LITERS
BARRELS(POL)	42.0000	GALLONS
BARRELS(POL)	5.6146	CUBIC FEET
BARRELS(POL)	0.1590	CUBIC METERS
CUBIC METERS	1000.0000	LITERS
CUBIC METERS	264.1721	GALLONS
CUBIC METERS	35.3147	CUBIC FEET
CUBIC METERS	28.3776	BUSHELS
CUBIC METERS	6.2898	BARRELS(POL)
CUBIC METERS	1.3080	CUBIC YARDS

UNITS OF AREA

<i>IF YOU HAVE</i>	<i>MULTIPLY BY</i>	<i>TO OBTAIN</i>
SQUARE CENTIMETERS	0.1550	SQUARE INCHES
SQUARE INCHES	6.4516	SQUARE CENTIMETERS
SQUARE FEET	0.0929	SQUARE METERS
SQUARE YARDS	0.8361	SQUARE METERS
SQUARE METERS	10.7639	SQUARE FEET
SQUARE METERS	1.1960	SQUARE YARDS
SQUARE METERS	1.0000	CENTARES
SQUARE METERS	0.0002	ACRES
SQUARE METERS	0.0001	HECTARES
ACRES	4046.8564	SQUARE METERS
ACRES	0.4047	HECTARES
HECTARES	10000.0000	SQUARE METERS
HECTARES	2.4711	ACRES

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